**Listing of Claims:**

1. (Previously Presented) A sensor for detecting food spoilage products within food packaging or the opening or compromise of packaging, comprising a film of a sensor composition on an internal surface of the packaging or a label retained inside packaging, which composition consisting of a metal co-ordinated complex and a resinous material, which complex, upon food spoilage or the opening or the compromise of packaging, undergoes a ligand exchange reaction to release a detectable component by the preferential binding of a gaseous substance to the metal(s) atoms of the complex, wherein the metal is selected from the group consisting of palladium, platinum, ruthenium and iron.

2. (Previously Presented) A sensor according to claim 1, wherein the gaseous substance is selected from the group consisting of at least one of a sulfur-containing compound, a nitrogen-containing compound, an alcohol-containing compound, a carbonyl-containing compound, and a phosphorus-containing compound.

3. (Previously Presented) A sensor according to claim 1, wherein the metal is complexed with a chromophore or fluorophore.

4. (Cancelled)

5. (Cancelled)

6. (Previously presented) A sensor according to claim 1, wherein the metal complex is a palladium-fluorophore complex.

7. (Previously Presented) A sensor according to claim 6, wherein the complex is palladium-Fluorexon.

8. (Cancelled)

9. (Previously Presented) A method of detecting food spoilage products within food packaging, or the opening or compromise of a package, comprising the steps of applying to an internal surface of the package a film of a sensor composition or inserting a label

coated with a film of a sensor composition to be retained within the packaging, which sensor composition consisting of a metal co-ordinated complex and a resinous material, which complex, upon food spoilage or the opening or the compromise of packaging, undergoes a ligand exchange reaction to release a detectable component by the preferential binding of a gaseous substance to the metal(s) atoms of the complex, wherein the metal is selected from the group consisting of palladium, platinum, ruthenium and iron.

10. (Original) A method according to claim 9, wherein food spoilage is detected by the release of a fluorophore or a chromophore from a metal complex.

11. (Previously Presented) A sensor according to claim 3, wherein the chromophore or fluorophore is selected from the group consisting of fluorescein isothiocyanate, fluorescein, fluoresceinamine, calcein blue, "Fura 2", quinzarin, alizarin complexone, alizarin red, alizarin , isocein, "Quin 2" and 4,4-dihydroxy-azobenzene 3,3-dicarboxylic acid, disodium salt.

12. (Previously Presented) A sensor according to claim 1, wherein the resinous material is polyvinyl alcohol (PVA).

13. (Previously Presented) A sensor for detecting food spoilage products within food packaging, comprising a metal co-ordinated complex disposed in or on a substrate, which complex, upon food spoilage, undergoes a ligand exchange reaction to release a detectable component by the preferential binding of a gaseous substance to the metal of the complex, wherein the metal complex is a palladium-fluorophore complex, and a barrier layer adapted to be disposed between the metal complex and the food, wherein the barrier layer is permeable to the food spoilage products but not to the metal or the detectable component.

14. (Previously Presented) A sensor according to claim 13, wherein the gaseous substance is selected from the group consisting of at least one of a sulfur-containing compound, a nitrogen-containing compound, an alcohol-containing compound, a carbonyl-containing compound, and a phosphorous-containing compound.

15. (Previously Presented) A sensor according to claim 13, wherein the metal complex is immobilized in a film.

16. (Previously Presented) A sensor according to claim 15, wherein the film is applied to a label adapted to be retained inside the food packaging.

17. (Previously Presented) A sensor according to claim 13, wherein the metal complex is palladium-Fluorexon.

18. (Previously Presented) A sensor according to claim 13, wherein the substrate is in the form of a film.

19. (Cancelled)

20. (Previously Presented) A sensor according to claim 19, wherein the detectable component exhibits appreciable color change only when excited by non-visible light.

21. (Previously Presented) A sensor according to claim 19, wherein the detectable component exhibits appreciable color change under visible light.

22. (Previously Presented) A sensor according to claim 19, wherein the sensor indicates the level of food spoilage by a plurality of indicia corresponding to increasing levels of contamination up to a danger level.

23. (Previously Presented) A sensor according to claim 13 further comprising a resinous material.

24. (Previously Presented) A sensor according to claim 23, wherein the resinous material is polyvinyl alcohol (PVA).

25. (Previously Presented) A sensor according to claim 19, wherein the sensor is in the form of an adhesive label adapted to be adhered to the interior surface of a portion of the food packaging.

26. (Previously Presented) A sensor according to claim 13, wherein the substrate is polyester.

27. (Previously Presented) A sensor according to claim 13, wherein the metal complex is incorporated into or into part of a packaging material.

28. (Previously Presented) A sensor according to claim 15, wherein the film is applied to the interior surface of a portion of the food packaging.

29. (Previously Presented) A method for detecting food spoilage products within food packaging, comprising the step of applying to the interior of the food packaging a sensor comprising a metal co-ordinated complex, which complex, upon food spoilage, undergoes a ligand exchange reaction to release a detectable component by the preferential binding of a gaseous substance to the metal of the complex, wherein the metal complex is a palladium-fluorophore complex.

30. (Previously Presented) A method according to claim 29 further comprising providing a barrier layer disposed between the metal complex and the food, wherein the barrier layer is permeable to the food spoilage products but not to the metal or the detectable component.

31. (Previously Presented) A method according to claim 29, wherein the detectable component exhibits appreciable color change under visible light.

32. (Previously Presented) A method according to claim 29, wherein the detectable component exhibits appreciable color change only when excited by non-visible light and the method further comprises the step of exposing the sensor to non-visible light.

33. (Previously Presented) A method according to claim 29, wherein the sensor indicates the level of food spoilage by a plurality of indicia corresponding to increasing levels of contamination up to a danger level.

34. (Previously Presented) A method according to claim 29, wherein the step of applying the sensor to the interior of the food packaging comprises adhering the sensor to the interior surface of a portion of the food packaging.

35. (Previously Presented) A method according to claim 29, wherein the step of applying the sensor to the interior of the food packaging comprises incorporating the metal complex into or into part of a packaging material.

36. (Previously Presented) A method according to claim 29, wherein the metal complex is immobilized in a film and the step of applying the sensor to the interior of the food packaging comprises applying the film to a label and inserting the label into the interior of the food packaging.